Guidance on staffing of child and adolescent in-patient psychiatry units

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Contents

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in-patient psychiatry units

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Summary

These guidelines are intended to represent a realistic aspiration for units and management to undertake safe and therapeutic work. The exact nature of the staffing required for a given unit will depend on its particular patient group.

Ward staff/patient shift ratios

<table>
<thead>
<tr>
<th>Nature of shift</th>
<th>‘Low’ case dependency</th>
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</thead>
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</tr>
<tr>
<td>Emergency/intensive care</td>
<td>1:2</td>
<td>1:1</td>
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</table>

Ward manager

G or H grade nurse who should have further training in management and team leadership.

Psychiatry

One whole-time equivalent (WTE) consultant /10–12 bed unit. Includes time for direct patient contact, case management, strategic planning and representing the unit to management or purchasers. More consultant time for larger units. Slightly less may be necessary for children’s units if other senior professionals take on managerial roles. An additional minimum of four hours/patient/week of non-psychiatrist time (staff grade psychiatrist or trainees within a training role). On-call psychiatry cover must be available at all times during a unit’s hours of operation.

Clinical psychology

One WTE clinical psychologist for adolescent units and 0.8 WTE for children’s units. At least one session input is needed for specialist activities such as psychometric testing or specific therapeutic interventions.
Social work
Minimum of one session social work input/unit. Further social work input up to 0.5 WTE/unit is recommended to carry out a more complete role.

Psychotherapy
Access to psychotherapeutic sessions for all units. Up to 0.5 WTE for more complete case work and supervision roles.

Family therapy
Access to sessional family therapy input for all units. Up to 0.5 WTE family therapist time for case work and supervision.

Occupational and speech therapy
Access to sessions for both adolescent and children’s units.

Education
All units must have a dedicated educational provision. Minimum staffing level is one teacher to four students/lesson – including the head teacher or teacher in charge. Up to ratio of 1:1 can be necessary for specific individual programmes or patient groups.
1. Introduction

The intention of these guidelines on staffing levels and skill mix is to serve as a benchmark against which clinicians may judge staffing levels in their own units and a reference point for use in discussions with purchasers or trusts. In arguing for specific guidelines, we have tried to strike a balance between aiming for an unrealistic ideal and settling (as we believe many units do) for a basically inadequate working environment to do complex assessment and treatment tasks. The guidelines should represent a realistic aspiration for units and management to undertake their work safely and therapeutically.

The preparation of these guidelines has been based on:

- review of the national and international clinical and research literature relating to staffing levels in child and adolescent units (see Green & Burke, 1998, for full discussion)
- review of the in-patient staffing guidelines produced by the American Academy of Child and Adolescent Psychiatry (AACAP, 1990)
- data from a national survey of clinical practice in UK child in-patient units (Green & Jacobs, 1998) (see Appendix)
- data from an unpublished survey of clinical practice in nine adolescent units in south-east England (see Appendix)
- consultation with the Royal College of Nursing and PRESENT (National Association for the Education of Sick Children) (see Appendix)
- consultation with clinical colleagues from a range of disciplines represented on in-patient units

For the ward team we believe the most appropriate focus for recommendations is the shift ratio: that is, the specific number of staff on a particular shift related to the number of patients cared for during that shift. Similarly, lesson ratios are given for teaching staff. For other staff the recommendations relate to hours/case or sessions/case. From this, the overall staffing requirements for a particular unit can be derived: taking into account whether the unit is a five- or seven-day unit, number of day patients against the number of in-patients, etc.
2. Ward staff

The modern ward milieu is a complex arena where basic milieu care intersects with many other tasks (Table 1).

The staffing ingredients necessary to deliver such milieu care are summarised by Cotton (Cotton, 1993) as “a sufficient quantity of people selected for certain qualities, trained to deliver therapeutic management, and arranged in an organisational structure”. Milieu treatment is a labour intensive activity: attempts to operate with too few staff are a recipe for deteriorating milieu care, staff stress and burn out.

Three variables influence the necessary shift ratio.

- The **skill mix** of staff: both within the nursing team and in the wider staff group (lack of appropriate staffing elsewhere in the team will increase demands on the nursing ward team). Furlong & Ward (1997) suggested a ‘skill mix score’, calculated by assigning a score of 1 for an A grade nurse up to 7 for a G grade nurse and calculating the total for a shift. The ratio of qualified/unqualified staff was also recorded.

- The **task demands** of a particular shift, ranging from low-intensity periods of basic supervision to more structured periods such as mealtimes and then active milieu therapy and intensive care. Some patients – for instance those with psychosis – will find less structured ward times particularly difficult and the shift ratio will need to reflect this.

Table 1. Typical range of tasks that milieu staff undertake

<table>
<thead>
<tr>
<th>Tasks</th>
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<tbody>
<tr>
<td>• Care of basic needs: ensuring safety, nutrition, comfort and cleanliness.</td>
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<tr>
<td>• Maintenance of unit organisation in space and time: activity schedules, programmes etc.</td>
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<td>• Encouraging daily living skills.</td>
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<tr>
<td>• Maintaining a healthy group dynamics among the patients through active early interventions and group work.</td>
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<tr>
<td>• Structured nursing and psychiatric assessments, such as syndrome rating scales, behaviour rating scales, observations of socialisation.</td>
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<tr>
<td>• Individual counselling of patients.</td>
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<tr>
<td>• Delivering specific psychological treatments such as cognitive–behavioural therapy or anxiety management.</td>
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<td>• Delivering and monitoring medications</td>
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<td>• Taking part in team meetings or case conferences and presenting assessments.</td>
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<tr>
<td>• Care planning with colleagues.</td>
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<tr>
<td>• Managing patient contact with families; preparing for and debriefing after weekend leave; managing informal but intense communications from distraught or angry parents.</td>
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<tr>
<td>• Therapeutic work with patients and their parents and siblings.</td>
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Case dependency and case mix. Factors that may need to be considered in a measure of patient dependency in child and adolescent psychiatry have been summarised by Cotton (Table 2). These include not only patient variables, but also the impact of other patients in the milieu and external factors such as family and social support. Furlong & Ward (1997) piloted an instrument which operationalised patient dependency on a child psychiatry unit as the level of nursing intervention necessary at a particular time in order to meet a patient’s ‘basic needs’ (Maslow, 1954) and to maintain therapeutic care. This study showed predictable fluctuations of total ward dependency scores (sum of patient dependencies) during the weekly cycle and links between dependency, staffing levels and independent estimations of quality of care. The authors suggest that such dependency scores could be used to anticipate likely need and necessary staffing shift ratios; they might also be a better guide than bed occupancy to making decisions about advisability of admissions.

Quantifying skill mix, patient dependency and task demands for any particular situation may allow a more systematic decision-making that is able to adapt to the rapid fluctuations in need between or even within shifts.

Comparative standards

The American Academy of Child and Adolescent Psychiatry (1990) recommends shift ratios of 1:3 for times of basic observation and maintenance of safety, 1:2 or 4:6 for active milieu therapy and 1:6 as a minimum for night-time. Other American authors recommend staff:patient ratios of at least a 1:2 for active milieu therapy

Table 2. Factors indicating the need for higher shift ratios (adapted from Cotton, 1993)

<table>
<thead>
<tr>
<th>1. Patient heterogeneity</th>
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</thead>
<tbody>
<tr>
<td>Greater number of patients</td>
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<tr>
<td>Broader range of ages</td>
</tr>
<tr>
<td>Larger spans of levels of developmental functioning and diagnosis (e.g. combining cognitively impaired children or children with psychosis with brighter children with behavioural disorders)</td>
</tr>
<tr>
<td>2. Case severity</td>
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<tr>
<td>Greater severity and pervasiveness of impairments</td>
</tr>
<tr>
<td>Severity of symptoms, such as suicidality, aggressiveness, sexualisation</td>
</tr>
<tr>
<td>3. Lack of family or support systems outside the hospital</td>
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<tr>
<td>4. Poor therapeutic alliance (e.g. families with statutory orders or referred from courts)</td>
</tr>
<tr>
<td>5. Frequent staff turnover</td>
</tr>
<tr>
<td>6. Shorter lengths of stay (more acute admissions and an inability to develop routines and relationships)</td>
</tr>
</tbody>
</table>
Cotton describes a ratio of five or six staff to twelve patients during the daytime shift, four or five staff for the evening shifts and three or four staff at weekends with fewer patients (Cotton, 1993).

### Ward staff recommendations – training and professional qualities

Milieu staffing in the UK has been primarily a nursing task, drawing from both general children’s nursing (RSCN) and mental health nursing (RMN), to some extent depending on where the unit is based (Paice, 1996). The strong move recently is for RMN qualification to be the primary requirement (Hinks et al., 1988) but RSCN or double-qualified nurses are likely to remain very valuable, particularly in paediatrically oriented settings. Recommendations from the Allitt inquiry will make it mandatory for staff to have a specialist qualification in children’s nursing or RMN 603 training. This contrasts with the tradition in the USA, where there is a greater emphasis on non-nursing graduate employees, often psychology students on interim placements of one or two years (Ney & Mulhivill, 1989; Cotton, 1993). Perhaps too little interest is taken in the UK in this possibility. Senior staff and culture carriers within the milieu should be nursing staff but a number of other young graduate staff from other disciplines might be employed in primary care roles.

Qualities looked for in psychiatric nurses working in the milieu have often reflected a view of their role as intuitive, warm-hearted and caring, with personal stability, a capacity to tolerate anxiety, and a sense of humour (Brown et al., 1974). The modern milieu demands sophisticated skills in addition to these, at least in the senior staff. More recently, Cotton (1993) emphasised staff qualities of respect and empathy, self-reflection and self-awareness, energy, resilience, cooperation, intellectual curiosity and playfulness.

### Table 3. Ward staff/patient shift ratios

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</tr>
<tr>
<td>Low intensity occupational activities</td>
<td>1:3 (note – some patients may find low intensity activities highly demanding)</td>
<td>1:2</td>
</tr>
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<td>Active therapeutic programming times</td>
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Minimum skill mix should be two trained members of staff (Grade E, F, G or H) per shift (one on nights). The use of non-nursing graduate employees such as psychology students with appropriate supervision might be encouraged. The use of an NEB nursery nurse and play leaders is widespread in children’s units and is to be welcomed.

Ward staff recommendations – nurse management

Ward management on the in-patient unit is complex. It should be accomplished by a ward manager at the level of G or H who should have further training in management and team leadership.

Ward staff – non-dedicated units

Adolescents and children with mental health needs may be admitted to paediatric or adult psychiatric wards. The numbers and characteristics of patients admitted in this way are poorly studied, as is information as to whether admissions of this type are out of preference by clinicians or out of necessity due to lack of child and adolescent mental health service in-patient provision locally. The lack of information is a cause for concern since it is unclear to what extent the care offered in such environments is adequate. This document does not attempt recommendations for these situations, but the comments about staff skill mix, training, and numbers, as well as patient dependency, contained here may well be pertinent.
3. Psychiatry

Comparative standards.
The American Academy of Child and Adolescent Psychiatry (1990) recommends 5 hours per week Child psychiatrist time for each patient, to include medical management, staff contact, conferences etc. Steiner et al (1991) suggest a formula for the time commitment of a medical director of 0.06 WTE per bed; including 8 to 10 hours per week meeting time, 2 hours a week for medical staff supervision and a further 2 hours a week administration.

Recommendations – psychiatry
One WTE consultant is recommended for a 10–12 bed unit. This includes time for direct consultant contact with patients, wider case management, strategic planning, a unit leadership function and representing the unit in the interface with trust management. More consultant time will be needed for larger units or if there are other significant clinical/academic commitments; slightly less may be necessary for children’s units if other senior professionals take on managerial roles.

An additional minimum of four hours/patient/week of non-consultant time (staff grade psychiatrist or trainees within a training role) is needed. Too great a proportion of part-time junior staff can lead to problems in communication and the continuity of care. On-call psychiatric cover must be available during the hours of operations of a unit.

The considerable opportunities as well as the demands of the in-patient unit as a training placement needs particular attention from trainers and scheme organisers. Trainees should be supernumerary to the basic functioning of the unit and supervision should pay attention to managerial issues related to the trainee’s experience within a complex in-patient team as well as case management. In-patient placement can be particularly valuable for specialist registrars at the end of their training for special experience of complex clinical work and team management.
4. Clinical psychology

American Academy of Child and Adolescent Psychiatry guidelines (1990) recommend the presence of at least one psychologist in the team. In the UK, staffing levels are reported to meet this for adolescent units and to fall far short of this in children’s units (see Appendix).

Recommendations – clinical psychology

One WTE clinical psychology time is recommended for adolescent units and 0.8 WTE for children’s units. At least one sessional input is needed for specialist activities such as psychometric testing or cognitive–behavioural therapy.
5. Other mental health disciplines

It is recognised that the contribution of a number of other mental health disciplines to in-patient staffing is crucial but will inevitably vary according to local circumstances, available training, therapeutic orientation of the unit and types of patient served. There is evidence that a number of generic therapeutic tasks such as parental counselling, child/adolescent counselling and therapy, parent–child therapy, family oriented therapy, social skills, anger management, independence training, non-verbal therapies, etc. are shared out pragmatically among different disciplines in different units (depending presumably on staff availability, training and access to supervision) (Green & Jacobs, 1998). A number of highly specialised tasks, such as dynamic psychotherapy or intensive family therapy, should clearly not be delegated in this way. Such a use of staff may represent either an appropriate flexibility or a compromise in standards – depending on the quality of training and supervision provided. It raises issues not confined to in-patient teams.

This use of resource makes it difficult to give overall recommendations as to staffing levels of a number of disciplines. An appropriate range of guidance is suggested here. Probably not all units will be able to have the maximum of all disciplines, and managerial judgements about skill mix in the whole team will be made.

6. Social work

At least one social worker for every ten patients is suggested in the American Academy of Child and Adolescent Psychiatry guidelines (1990) with responsibilities for family assessments, social assessment, agency contact and team activities, including family therapy. Few units in the UK currently report having social workers at all.

Recommendations – social work

At minimum, there should be sessional social work input into a unit. Further social work input up to 0.5 WTE/unit is recommended to carry out a more complete role.
7. Psychotherapy

Only five UK child units had access to specialist psychotherapeutic treatment in 1995. Given the complex case load that units have to carry this is unsatisfactory. Psychotherapeutic input can focus on staff supervision as well as case work.

Recommendations – psychotherapy staffing
All units should have access to psychotherapeutic sessions. Some will require up to 0.5 WTE for case work and supervision.

8. Family therapy

This discipline is very unevenly spread in units. Given the importance of family oriented work in their functioning and the severity of the pathology that units see, access to family therapy time either for direct work or supervision of others is essential.

Recommendations – family therapy staffing
All units should have sessional family therapy input. Many will need 0.5 WTE family therapist time for case work and supervision.

9. Occupational therapy and speech therapy

Both adolescent and children’s units have need for access to occupational therapy and speech therapy sessions – both for discipline-specific and for generic tasks.
10. Education

All units must have a dedicated educational input. Essential education activities include teaching, liaison with schools, planning reintegration back to local schools after discharge, training and careers advice for older children, and contribution to assessments both with specialist educational assessment and general mental health assessment in the school environment. These assessments should be reflected in an individual education plan (IEP).

Background information

PRESENT (the National Association for the Education of Sick Children) has taken a particular interest in children and school-age adolescents on psychiatry in-patient units and has conducted a national survey of psychiatric unit schools in the UK (see Appendix). PRESENT recommend that young people spend as much time in school as their medical needs allow. Access to computer-assisted learning and video-conferencing could improve the ability of these students to access the mainstream curriculum and sustain an individual programme of study.

Recommendations – teacher staffing

The recommended basic staffing level is one teacher to four students/lesson – including the head teacher or teacher in charge. A ratio of up to 1:1 can be necessary for specific individual programmes. A standard for a pupil:computer ratio, perhaps 2:1, could also be usefully considered.
Appendix. Data on current staffing in UK in-patient units

Children’s units
In a recent UK-wide national survey, Green & Jacobs (1998) surveyed all identified child psychiatry in-patient units (n = 29). Their findings revealed:

- overall nurse:patient ratios of 1:1.2 (which equate to shift ratios of about 1:4 or less)
- mean unit size of child units is 10 beds
- mean consultant sessions were 4/week (range 2–5.8), SR sessions were 3/week (range 0–7) and registrar sessions were 4/week (range 0–8)
- two units had social work, only 19 out of 29 had psychology sessions and only five had psychotherapy sessions.

Adolescent units
A recent questionnaire inquiry of 16 adolescent units broadly in the south-east of England was made. Nine consultants responded. The results (unpublished) include the following:

- The mean number of beds was 15 with a mean of five further day patient places.
- The mean number of consultants was 1.33; senior registrars 1; registrars 0.66; staff grades/clinical assistants only on two units.
- The mean number of clinical psychologists was 1 (range 0.3-2.6); social workers mean 0.84; occupational therapists mean 0.7.
- The mean total nursing establishment was 18.3 (range 13–23).
- The mean nursing assistant establishment was 6.5 (included in figures for total nursing establishment).
- The mean teaching staff was 3 (range 1.5–5).
- The mean hours education per day was 4.

Education
The National Association for the Education of Sick Children conducted a UK survey of specialist schools within child and adolescent units in 1996/7 (n = 55) (unpublished, courtesy of executive director, Dr C. E. Skilling).
• The maximum number of teachers in any psychiatry unit was 5.5. Thirteen units had fewer than 2 WTE teachers. Twenty-eight units had between 2 and 3.9 WTE, 11 had between 4 and 6 WTE and the remaining three had more than 6 WTE.

• The highest three numbers for WTE were all from registered schools, while six of the nine units with a figure between 4 and 6 were also registered schools. Four more registered schools had between 2.5 and 3.4 WTE.

• The highest teacher:pupil ratio was 1:2 and the lowest 1:13. In 24% of units it was between 2 and 4:1; in 30% more than 6:1; in 14% more than 8:1

• Students in units were less likely to receive their National Curriculum educational entitlement than their peers in ordinary schools.

• Young people in units were less likely to have qualifications at school leaving.
References


